



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,540	08/28/2000	Alexander D. Schapira	246/214	7789

23639 7590 01/18/2007  
BINGHAM, MCCUTCHEN LLP  
THREE EMBARCADERO CENTER  
18 FLOOR  
SAN FRANCISCO, CA 94111-4067

EXAMINER
----------

GUILL, RUSSELL L

ART UNIT	PAPER NUMBER
----------	--------------

2123

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/18/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

### Application No.

09/648,540

### Applicant(s)

SCHAPIRA ET AL.

### Examiner

Russ Guill

### Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is in response to an Amendment filed November 20, 2006. Claims 1 - 18 are pending. Claims 1 - 18 have been examined. Claims 1 - 18 have been rejected. Claims 1 - 18 are allowable over the prior art of record.
2. This Office Action is NON-final because of new rejections made under 35 USC § 101 following further review.

### ***Response to Remarks***

3. Regarding claims 1 - 18 rejected under 35 USC § 101:
  - a. Although the claims now provide a tangible result, it is unclear where the amendments are supported in the disclosure, and how the result provides a useful result, as discussed in the rejections below. Further, upon further review, it appears that claims 1 and 14 also need a tangible result, as discussed in the rejections below.
  - b. If the Applicant believes that an interview including the Examiner's supervisor would be useful, then the Applicant is welcome to call for an interview.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **Claims 1 - 18** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. Regarding claims 1 - 2, the recited simulator appears to contain abstract operations such as determining whether to apply an output to a digital circuit output state. Therefore, to be statutory, the claim must be directed to a practical application producing a concrete, useful and tangible result. The claim does not appear to produce a useful and tangible result needed to support a practical application. Further, the MPEP recites (2106, IV, C, 2., (2), a) USEFUL RESULT): "In addition, when the examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by specifically reciting in the claim the practical application. In such cases, statements in the specification describing a practical application may not be sufficient to satisfy the requirements for section 101 with respect to the claimed invention". The Examiner respectfully requests that the claim be amended to recite the practical application in the claim.

b. Regarding claims 14 - 16, the recited simulator appears to contain abstract operations such as a digital circuit output being applied to a network input node when the digital circuit is in a non-high-impedance state. Therefore, to be statutory, the claim must be directed to a practical application producing a concrete, useful and tangible result. The claim does not appear to produce a useful and tangible result needed to support a practical application. Further, the MPEP recites (2106, IV, C, 2., (2), a) USEFUL RESULT): "In addition, when the

examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by specifically reciting in the claim the practical application. In such cases, statements in the specification describing a practical application may not be sufficient to satisfy the requirements for section 101 with respect to the claimed invention". The Examiner respectfully requests that the claim be amended to recite the practical application in the claim.

c. Regarding claims 3 - 4, the recited method appears to contain abstract ideas such as dynamically switching between a digital output signal and an analog output signal. Therefore, to be statutory, the claim must be directed to a practical application producing a concrete, useful and tangible result. The claim does not appear to produce a useful result needed to support a practical application. For a result to be useful, the result must have a utility that is specific, substantial and credible. The results of the claim (i.e., storing simulation information) do not appear to provide a well-defined, particular and immediate benefit that would support a specific and substantial utility. Further, the MPEP recites (2106, IV, C, 2., (2), a) USEFUL RESULT): "In addition, when the examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by specifically reciting in the claim the practical application. In such cases, statements in the specification describing a practical application may not be sufficient to satisfy the requirements for section 101 with respect to the claimed invention". The Examiner respectfully requests that the claim be amended to recite the practical application in the claim. The results of the claim,

(i.e., storing simulation information), do not appear to be clearly related to any practical application in the disclosure.

d. Regarding claims 5 - 7, the recited method appears to contain abstract ideas such as dynamically switching between a digital output signal and an analog output signal. Therefore, to be statutory, the claim must be directed to a practical application producing a concrete, useful and tangible result. The claim does not appear to produce a useful result needed to support a practical application. For a result to be useful, the result must have a utility that is specific, substantial and credible. The results of the claim (i.e., storing simulation information) do not appear to provide a well-defined, particular and immediate benefit that would support a specific and substantial utility. Further, the MPEP recites (2106, IV, C, 2., (2), a) USEFUL RESULT): "In addition, when the examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by specifically reciting in the claim the practical application. In such cases, statements in the specification describing a practical application may not be sufficient to satisfy the requirements for section 101 with respect to the claimed invention". The Examiner respectfully requests that the claim be amended to recite the practical application in the claim. The results of the claim, (i.e., storing simulation information), do not appear to be clearly related to any practical application in the disclosure.

e. Regarding claim 8, the recited method appears to contain abstract ideas such as simulating electrical operation at an interface. Therefore, to be statutory, the claim must be directed to a practical application producing a concrete, useful and

tangible result. The claim does not appear to produce a useful result needed to support a practical application. For a result to be useful, the result must have a utility that is specific, substantial and credible. The results of the claim (i.e., storing simulation information) do not appear to provide a well-defined, particular and immediate benefit that would support a specific and substantial utility. Further, the MPEP recites (2106, IV, C, 2., (2), a) USEFUL RESULT): "In addition, when the examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by specifically reciting in the claim the practical application. In such cases, statements in the specification describing a practical application may not be sufficient to satisfy the requirements for section 101 with respect to the claimed invention". The Examiner respectfully requests that the claim be amended to recite the practical application in the claim. The results of the claim, (i.e., storing simulation information), do not appear to be clearly related to any practical application in the disclosure.

f. Regarding claims 9 - 12, the recited method appears to contain abstract ideas such as identifying an interface between one or more digital circuits and an analog circuit. Therefore, to be statutory, the claim must be directed to a practical application producing a concrete, useful and tangible result. The claim does not appear to produce a useful result needed to support a practical application. For a result to be useful, the result must have a utility that is specific, substantial and credible. The results of the claim (i.e., storing simulation information) do not appear to provide a well-defined, particular and immediate benefit that would support a specific and substantial utility. Further, the MPEP

recites (2106, IV, C, 2., (2), a) USEFUL RESULT): "In addition, when the examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by specifically reciting in the claim the practical application. In such cases, statements in the specification describing a practical application may not be sufficient to satisfy the requirements for section 101 with respect to the claimed invention". The Examiner respectfully requests that the claim be amended to recite the practical application in the claim. The results of the claim, (i.e., storing simulation information), do not appear to be clearly related to any practical application in the disclosure.

g. Regarding claim 13, the recited method appears to contain abstract ideas such as simulating electrical operation at an interface. Therefore, to be statutory, the claim must be directed to a practical application producing a concrete, useful and tangible result. The claim does not appear to produce a useful result needed to support a practical application. For a result to be useful, the result must have a utility that is specific, substantial and credible. The results of the claim (i.e., storing simulation information) do not appear to provide a well-defined, particular and immediate benefit that would support a specific and substantial utility. Further, the MPEP recites (2106, IV, C, 2., (2), a) USEFUL RESULT): "In addition, when the examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by specifically reciting in the claim the practical application. In such cases, statements in the specification describing a practical application may not be sufficient to satisfy the



requirements for section 101 with respect to the claimed invention". The Examiner respectfully requests that the claim be amended to recite the practical application in the claim. The results of the claim, (i.e., storing simulation information), do not appear to be clearly related to any practical application in the disclosure.

h. Regarding claims 17 - 18, the recited method appears to contain abstract ideas such as transforming an input of an analog circuit into an ioput. Therefore, to be statutory, the claim must be directed to a practical application producing a concrete, useful and tangible result. The claim does not appear to produce a useful result needed to support a practical application. For a result to be useful, the result must have a utility that is specific, substantial and credible. The results of the claim (i.e., storing simulation information) do not appear to provide a well-defined, particular and immediate benefit that would support a specific and substantial utility. Further, the MPEP recites (2106, IV, C, 2., (2), a) USEFUL RESULT): "In addition, when the examiner has reason to believe that the claim is not for a practical application that produces a useful result, the claim should be rejected, thus requiring the applicant to distinguish the claim from the three 35 U.S.C. 101 judicial exceptions to patentable subject matter by specifically reciting in the claim the practical application. In such cases, statements in the specification describing a practical application may not be sufficient to satisfy the requirements for section 101 with respect to the claimed invention". The Examiner respectfully requests that the claim be amended to recite the practical application in the claim. The results of the claim, (i.e., storing simulation information), do not appear to be clearly related to any practical application in the disclosure.

*Allowable Subject Matter*

6. Claims 1 - 18 are allowable over the prior art of record.
7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).
8. A reasons for indicating allowability of the claims was provided in previous Office Actions dated August 21, 2006 and March 21, 2006.

*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russ Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday - Friday 9:30 AM - 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

Art Unit: 2123

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RG

Russ Guill  
Examiner  
Art Unit 2123

  
PAUL RODRIGUEZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100  
1/12/07